

B1
cancel T542P, D543G, K593T, Y595S, Y385Q, Y385S, Y385N, Y385L, Y385H, G387S, G387P, and
G388P.

B2 47. (Amended) A composition comprising a mutant Pfu DNA polymerase,
wherein said mutant DNA polymerase comprises one or more mutations at amino acid positions
selected from the group consisting of: T542, D543, K593, Y595, Y385, G387, and G388.

48. (Amended) The composition of claim 47, wherein said mutant Pfu DNA
polymerase comprises one or more mutations selected from the group consisting of: T542P,
D543G, K593T, Y595S, Y385Q, Y385S, Y385N, Y385L, Y385H, G387S, G387P, and G388P.

B3 54. (Amended) A kit comprising a mutant DNA polymerase which comprises a
reduced DNA polymerization activity and packaging material therefor, wherein said mutant Pfu
DNA polymerase comprises one or more mutations at amino acid positions selected from the
group consisting of: T542, D543, K593, Y595, Y385, G387, and G388.

55. (Amended) The kit of claim 54, wherein said mutant Pfu DNA polymerase
comprises one or more mutations selected from the group consisting of: T542P, D543G, K593T,
Y595S, Y385Q, Y385S, Y385N, Y385L, Y385H, G387S, G387P, and G388P.

57. (New) A mutant Pfu DNA polymerase produced by introducing a mutation in to a
polynucleotide encoding a wild type Pfu DNA polymerase to produce a mutant Pfu DNA
polymerase comprising one or more mutations at amino acid positions selected from the group
consisting of: T542, D543, K593, Y595, Y385, G387, and G388.

B4 58. (New) A mutant Pfu DNA polymerase comprising a reduced DNA
polymerization activity, wherein said mutant Pfu DNA polymerase is produced by the steps:

(a) providing a polynucleotide encoding a wild-type Pfu DNA polymerase;

(b) introducing one or more nucleotide mutations into said polynucleotide to produce a
mutant polynucleotide encoding said mutant Pfu DNA polymerase; and

(c) expressing said mutant polynucleotide to produce said mutant Pfu DNA polymerase,
wherein said mutant Pfu DNA polymerase comprises one or more mutations at amino acid
positions selected from the group consisting of: T542, D543, K593, Y595, Y385, G387, and
G388.

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